

REMARKS

Applicants courteously solicit favorable reconsideration of this application upon entry of the present Amendment.

Claims presented and request for rejoinder

Applicants present claims 1-11, 14-18, and 20-27.

Applicants acknowledge the Examiner's regrouping of product-by-process claim 22 within the elected claims, but respectfully submit that in view of such regrouping the process claims should be rejoined for examination on the merits.

New claims 26 and 27 find basis in the original specification at page 3, paragraph [0019]; page 6, paragraph [0041]; and page 6, paragraph [0043], as examples.

The elected claims 1-7, 9, 16-18, and 21-27 pertain to a UHT-treated product that has a relatively low viscosity after heat treatment (UHT). The UHT-treated product is reheatable and, when reheated, exhibits a viscosity increase as recited in claims 1, 22 or 24, to mention examples, and does not exhibit post-thickening effects (page 6, paragraph [0042]). The elected claims 22, 23 and 24-27 relate to the reheated product.

Traversing the Rejections

Applicants traverse the rejection of claims 1-7, 16-18, and 21-24 under 35 U.S.C. §103(a) as being unpatentable over Kettlitz et al. (U.S. 6,235,894) in view of Daenzer-Alloncle et al. (U.S. 6,139,896). It is respectfully submitted that the rejected and added claim(s) would have been unobvious over the cited references.

Applicants courteously submit the references do not teach the present inventions, would not have been combined and, furthermore, even if, *arguendo*, they were combined, the elected claimed inventions would have been unobvious to a person of ordinary skill in the art.

In short, even if Daenzer-Alloncle would have been combined with Kettlitz, the combination would not have suggested the viscosity increase by re-heating the UHT-heated product as stated in claim 1, claim 7, claim 22, claim 23 or claim 24. A person of ordinary skill in the art would have had no incentive or reason to select for UHT-treated products that particular starch of Kettlitz for use in Daenzer-Alloncle, nor selecting it for solving Applicants' problem.¹ Restated, Applicants confronted a problem needing a solution, namely, the provision of a heat-treated, sterilized product having a relatively low viscosity after a UHT treatment, and displaying an increased viscosity when reheated. Kettlitz does not mention UHT-treatment and, furthermore, contrary to the present invention Kettlitz teaches products that maintain a stable high viscosity upon reheating or cooling. Kettlitz specifically discloses the "high viscosity is also retained after repeated heating and cooling" (col. 4, lines 30-31), which certainly does not teach "said UHT-treated product has a viscosity between 0.10 to 0.50 times the viscosity obtainable after re-heating of said UHT-treated product" as in claim 1, nor the "the UHT-heated product has a viscosity that is below 1500 mPa.s and is 0.15 to 0.50 times the viscosity of said reheated food product, said reheated food product having a viscosity above 2000 mPa.s" as in claim 24. These gaps in Kettlitz's teachings are not overcome by citation to the fluid lactic cream products according to Daenzer-Alloncle.

¹ "Of course *all* of the references may be used to show what the art knew, and in that sense "combined" but the fact remains that neither reference contains the slightest suggestion to use what it discloses in combination with what is disclosed in the other." *In re Adams*, 148 U.S.P.Q. 742, 745 (CCPA 1966).

I. The prior art does not teach (A) “wherein, after UHT-treatment, said UHT-treated product has a viscosity between 0.10 to 0.50 times the viscosity obtainable after re-heating of said UHT-treated product” as in claim 1; “wherein the UHT-treated product has a viscosity that increases upon reheating, and whereby the viscosity is 0.15 to 0.50 times the viscosity obtained after reheating the UHT-treated product in step (f)” as in claim 22; or “before reheating said product has been UHT-treated and the UHT-heated product has a viscosity that is below 1500 mPa.s and is 0.15 to 0.50 times the viscosity of said reheated food product, said reheated food product having a viscosity above 2000 mPa.s,” as in claim 24.

Even if combined, Kettlitz and Daenzer-Alloncle would not have suggested these claim elements.

a. The Primary Reference does not teach UHT treatment.

The prior art does not teach “a UHT-treated product comprising a stabilized starch n-alkenyl succinate as a texturizing agent...” The Office Action acknowledges “Kettlitz et al do not specifically disclose UHT treatment of the food products.” Office Action, page 4.

b. Neither Kettlitz Nor Daenzer-Alloncle Teach Viscosity Increase Upon Reheating a UHT-treated food product.

(1). Kettlitz teaches no viscosity increase, and acknowledges a possible decrease.

Kettlitz teaches no increase in viscosity as recited in claims 1, 22, 23 or 24. Kettlitz discloses stabilized starches that *maintain/retain* their pre-existing viscosity *even after reheating*. Kettlitz states the “high viscosity is also retained after repeated heating and cooling.” Kettlitz at col. 4, lines 30-31. This would not have suggested the viscosity recitations in any of claim 1, claim 22 or claim 24,

especially not the increase in viscosity upon reheating the UHT-treated product, and certainly not the viscosity recited in the heating, cooling and reheating in claim 22.

Besides, Kettlitz elsewhere refers to “heat-stable high viscosity starches” (Abstract) and at column 4, lines 7-8, and lines 12-16, Kettlitz explains:

The products of the present invention are starches which ... have been modified in such a way that they retain a high viscosity even upon prolonged heating.

* * *

The starches of the present invention show only a slight decrease of viscosity during the measurement with the Brabender viscograph, preferably the drop in viscosity is less than 20%[,] more preferably less than 10%[,] during heating at 95°C.

Kettlitz would not have suggested the viscosity recitations in any of claim 1, claim 22, claim 23, or claim 24: Kettlitz specifically states that a high viscosity is retained upon repeated reheating and cooling, or there is “a slight decrease of viscosity.”

Applicants have considered the Office Action at page 4 and its citations to Kettlitz. The Office Action cites a paragraph mentioning heating (Kettlitz, col. 1, lines 46-50). That paragraph refers to “cooking stable starches” (col. 1, line 46). An antecedent to “cooking stable starches” includes col. 1, lines 35-36 that refer to a heat stage that “guarantees a stable paste viscosity.” It is consistent with the subsequent Kettlitz teaching in col. 4 that the modified starches have a stable viscosity upon repeated heating and cooling. In short, a “stable paste viscosity” is not the viscosity increase recited in Applicants’ claim 1, claim 22, claim 23 or claim 24, nor is it what is alleged in the Office Action.

(2). The Secondary Reference to Daenzer-Alloncle Does Not Supply Teachings Missing from Kettlitz because its fluid lactic cream product is not even meant to be reheated.

The secondary reference to Daenzer-Alloncle would not have been among the documents and literature considered if one of ordinary skill in the art were even considering a reheatable UHT-treated product which develops full, higher viscosity upon reheating.

Daenzer-Alloncle refers to fluid lactic creams, and those who are skilled in the art understand that such fluid lactic creams are typically consumed cold. Thus there would have been no reason to reheat a fluid lactic cream. There would have been no reason to expect or to consider increased viscosity (thickening effect) after heating the already UHT-treated food product. That is, Daenzer-Alloncle would not have suggested a UHT-treated product that should develop its viscosity when reheated.

(3). Even if Daenzer-Alloncle were combined with Kettlitz, the combined teachings still would not have suggested claim 1, claim 7, claim 22 or, for instance, claim 27.

Taking the combined references at face value, the use of a stabilized, heat-treated starch according to the Kettlitz patent, even if considered with the product according to Daenzer-Alloncle, might have led -- *arguendo* -- to a product having a retained/maintained viscosity as taught by Kettlitz (see Kettlitz at col. 4, lines 5-16) and that might be storage-stable according to Daenzer-Alloncle.

Kettlitz does not refer to a UHT-treated product, and discloses the viscosity either remains stable or decreases somewhat after reheating, whereas Daenzer-Alloncle refers to a viscosity of 250 to 1600 mPas in its Example 3, but does not disclose or suggest any reheating of a UHT-treated product.

Daenzer-Alloncle refers to a viscosity of 250 to 1600 mPas, whereas Applicants' claim 1 states the "UHT-treated product has a viscosity between 0.10 to 0.50 times the viscosity obtainable after reheating of said UHT-treated product."

Daenzer-Alloncle refers to a viscosity of 250 to 1600 mPas, whereas Applicants' claim 7 states that after UHT treatment, the viscosity is less than 1500 mPas, but after reheating it is above 2000 mPas.

Daenzer-Alloncle refers to a viscosity of 250 to 1600 mPas, whereas Applicants' claim 24 states that , before reheating, the food product has been UHT-treated and the UHT-heated product has a viscosity that is below 1500 mPa.s and is 0.15 to 0.50 times the viscosity of said reheated food product, said reheated food product having a viscosity above 2000 mPa.s."

Daenzer-Alloncle refers to a viscosity of 250 to 1600 mPas, whereas in Applicants' claim 27 "the viscosity of the UHT-treated product after UHT treatment and the viscosity of said reheated food product differ by at least 1800 mPa.s."

Daenzer-Alloncle refers at best to modified starch, without much more. See, Abstract; col. 1, line 62 ("modified starch"); col. 2, lines 56-57 ("stabilized and cross linked"); col. 3, lines 17-18 ("starch"); col. 3, line 30 ("starch"), and does not specifically address the texturizing agent in Applicants' claims, nor would it have led to a person of ordinary skill in the art combining it with Kettlitz with an expectation of obtaining a food product according to Applicants' claims 1, 7, 22, 23 or 24.

Furthermore, Applicants' Comparative Example reports using a hydroxypropylated tapioca diphosphate starch as therein stated, which would seem to be a modified starch, and it is apparent that it did not yield a product in which the viscosity before reheating is according to claims 1, 7, 22, 23 or 24.

Applicants point this out as evidence to rebut a thesis that any modified starch would lead to the products according to the aforementioned claims.

II. Reliance on Inherency is Misplaced.

Inherency is irrelevant and immaterial as to an unknown product having an unknown advantage and an unknown characteristic *In re Spormann*, 150 U.S.P.Q. 449, 452 (CCPA 1967) (“Obviousness cannot be predicated on what is unknown.”); *In re Adams*, 148 U.S.P.Q. 742 (CCPA 1966) (“Of course it is inherent, otherwise appellant's invention would not work. But patentability here does not hinge on inherency. It depends on the unexpected and unsuggested increase in heat transfer *efficiency*. No reference suggesting this has been produced, only *ex post facto* explanations as to why anyone should have been able to see that it would be more efficient to use aerated water.”)

The Office Action dated February 18, 2010 offers no factual predicate for the conclusion that viscosity after reheating the UHT-treated product is a “characteristic [that] would have been expected to be in the claimed range absent any clear and convincing evidence and/or arguments to the contrary.”

- Kettlitz “do not specifically disclose UHT treatment of the food products” (Office Action, page 5).
- Kettlitz teach the viscosity does not increase when the food product is reheated (Kettlitz, col. 4, lines 30-31), and may even decrease (Kettlitz, col. 4, line 15).
- Daenzer-Alloncle does not teach reheating the fluidic lactic cream – in fact one skilled in the art would not have been motivated to reheat it.

The Office Action dated February 18, 2010 offers no factual predicate for the conclusion that “the change in the viscosity after reheating is the inherent result of the use of the starch n-alkenyl

succinate as texturing agents in these products...” (Office Action, page 6). It’s undermined, contradicted and rebutted by Kettlitz:

- Kettlitz does not teach UHT-treated products, but rather products “retain a high viscosity even upon prolonged heating” (col. 4, lines 7-8) and even “after repeated heating and cooling” (Col. 4, line 11).
- In fact, *Kettlitz acknowledge* there may even be *a decrease* in viscosity during heating at 95°C (Col. 4, lines 12-16), which *would not have suggested* the *viscosity increase* recited in Applicants’ claims.
- These deficiencies are not overcome even in if Kettlitz is taken view of Daenzer-Alloncle’s lactic cream product, which is not re-heated. Daenzer-Alloncle does not suggest the viscosity changes recited in Applicants’ claims.

The Advisory Action dated June 21, 2010 states that “one of ordinary skill would recognize the viscosity after reheating... would have been an inherent result...” (emphasis added). There does not appear to be factual basis for saying “one of ordinary skill would recognize,” since neither Kettlitz nor Daenzer-Alloncle disclose any viscosity relationship between the product before reheating and the reheated product, and neither discloses the viscosity increases upon reheating the UHT-treated product as recited in claims 1, 7, 22, 23 or 24. Indeed, the Daenzer-Alloncle Examples do not disclose any reheating, and Kettlitz discloses a high viscosity is retained, but the product’s viscosity, whatever it is, can decrease by less than 20% (col. 4, line 15) when the product is heated at 95°C.

III. An Examiner’s Declaration is Requested.

Applicants respectfully request a declaration from the Examiner setting forth a factual basis for

(1) reheating a fluidic lactic cream; (2) why a person of ordinary skill would have considered reheating such a fluidic lactic cream with an expectation that its viscosity would increase as recited in the claims; and (3) asserting, contrary to Kettlitz at col. 4, lines 5-16, that “viscosity after re-heating, this characteristic would have been expected to be in the claimed range...”

IV. Conclusion

Applicants courteously solicit favorable reconsideration and allowance. The Examiner is courteously invited to contact Applicants’ legal representative in an effort to resolve any remaining issues.

V. Fees

To the extent necessary during prosecution, Applicants hereby request any required extension of time not otherwise requested and hereby authorize the Commissioner to charge any omitted fee required to secure entry of this Amendment, including application processing, extension, and extra claims fees, to Deposit Account No 06-1135 regarding our order number 7393/84061.

Respectfully submitted,
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